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ABSTRACT

Previous research has indicated that preschool aged children are aware of racial differences, but this awareness does not affect their interaction in mixed-race groups. The present study extended this work by comparing 2- and 4-person homogeneous and racially-mixed groups of 3 1/2 to 5 year old children. Results indicated that the frequencies of initiations and negative responses were lower in 4-person racially mixed groups than in 4-person homogeneous groups. Also, the ratio of responses in general to initiations was lower in mixed groups than in homogeneous groups. Thus, racial awareness was found to inhibit social behavior.
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The Effects of Racial Composition and Group Size on Interaction Patterns in Preschool Children¹

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This research focused on possible behavioral manifestations of racial awareness in preschool children. A number of studies (e.g., Ammons, 1950; Clark & Clark, 1966; Crooks, 1970) have found that most 3 year old children, both white and black, exhibit some awareness of racial differences. However, other studies (Goodman, 1964; Stevenson & Stevenson, 1960), while finding evidence of racial awareness and stereotypic attitudes, did not find that young children differed in their frequency of intraracial and interracial social behaviors.

This latter result is somewhat unexpected, given the reasonable assumption that there should be a greater degree of correspondence between attitudes and behavior in young children than in adults. Both Goodman (1964) and Stevenson and Stevenson (1960) observed the social behavior of children (i.e., who interacts with whom) only in interracial nursery schools. It could be that while there are no differences in the frequency and type of social contacts within interracial groups as a function of racial awareness, these contacts do differ from those made in groups composed entirely of persons of the same race.

The proposition examined was that interaction in young children would differ as a function of the racial composition of the groups to which they belong. Racial composition was systematically varied by forming

groups of black children, groups of white children, and groups with equal numbers of blacks and whites. Group size was also manipulated by forming 2- and 4- person groups, since it seemed reasonable that constraints inherent in the dyad might temper the effects of racial awareness. It was expected that racially mixed groups would differ from racially homogeneous groups with respect to frequency and type of interaction, and these differences would be more pronounced in 4- person than in 2- person groups.

Method

Twenty-seven black and 27 white children of low-income families, ranging in age from 3 1/2 to 5 years old, were the subjects.² Subjects were formed into 2- and 4-person all white groups, 2- and 4-person all black groups, and 2- and 4-person groups composed of equal numbers of black and white children. The members of a group were always strangers to each other, and there were three groups of each type.

Each group of children was brought to a small play area that contained a table and four chairs. Four coders (two black and two white females) were seated off to the side of the area, but with a clear view of the table. The experimenter (a black female) placed four hand puppets and some blocks on the table. She then knelt to the height of the children and nodded toward the coders. She explained that the ladies were going to watch them play with the toys for a little while (10 minutes); they could do what they wanted around the table but they must not talk to the ladies. The experimenter then left the area and returned when time was up.

The coders were trained to identify three types of activity:

(a) initiation of social activity (e.g., offers toy, asks question, etc.); (b) positive response to initiation (e.g., accepts toy, answers question, etc.); and (c) negative response to initiation (e.g., strikes other child, shows anger, etc.). One white and one black coder independently rated each child's behavior. They noted each time a child engaged in one of the three behaviors and, in the racially-mixed 4-person groups, the race of the other person. For each group, they began coding when the experimenter had left the area and they stopped when she returned. As an index of reliability, product-moment correlation coefficients were computed for each coder pair's ratings of the children on each type of behavior. The six coefficients (2 coder pairs X 3 behaviors) ranged from .60 to .84, with a mean of .72.

Results

The means of the coders' judgments were used as the basic data. Moreover, to control for differences in the number of persons contributing to a total score, the mean number of acts in each category per person of the same race in each group was calculated. These scores were subjected to a 2(race of subjects--black or white) X 2 (group racial composition--homogeneous or mixed) X 2 (group size--2- or 4-person) analysis of variance for each category. These analyses revealed that results were as predicted for initiations and negative responses. The racial composition X group size interaction was marginally significant for initiations ($F_{1,16}=4.14$, $p < .07$). Tests of simple effects (Winer, 1962) revealed that there were more initiations in 4-person homogeneous groups than in 4-person racially mixed groups (mean initiations were 5.25 and 1.83, respectively; $F=5.85$; $p < .05$), but there was no difference for 2-person groups ($F = .30$).

Moreover, the racial composition X group size interaction for negative responses was significant ($F = 6.19$, $p < .025$). Tests of simple effects revealed that there were more negative responses in 4-person homogeneous groups than in 4-person mixed groups (mean negative responses were 2.79 and .25, respectively; $F = 7.81$; $p < .025$), but there was no difference for 2-person groups ($F = .32$). The pattern of scores for positive responses was similar to those for initiations and negative responses, but no effect reached statistical significance.

Since the number of responses to a great extent was contingent on the number of initiations, it was of interest to examine the rate of responses per initiations by others. Therefore, three additional $2 \times 2 \times 2$ analyses of variance were performed on the ratios of positive responses to initiations, negative responses to initiations, and responses in general to initiations. Since the results of the three analyses were essentially the same, only those for the ratio of responses in general to initiations by others are reported here. This analysis indicated a significant racial composition main effect ($F = 168.51$, $p < .00001$); the mean ratio in homogeneous groups was .85, while it was .38 in racially mixed groups. Moreover, there was a significant main effect for group size ($F = 14.96$; $p < .005$) and a significant race X group size interaction ($F = 12.86$, $p < .005$). Exploration of this interaction through tests of simple effects revealed that black subjects had higher ratios of responses to initiations in 2-person groups than in 4-person groups (mean ratios were .74 and .46, respectively; $F = 27.80$; $p < .001$), but there was no difference in ratios for white subjects.³

Who made initiations and responses to whom in 4-person racially

mixed groups (the condition that was most like that of past studies) was also examined. These data supported the results of past studies (Goodman, 1964; Stevenson & Stevenson, 1960) in that dyadic interaction within such groups was not influenced by the race of the participants.

Discussion

The results, in general, support the position, advanced in the introduction, that the racial composition of groups affects interaction patterns. Subjects were more inhibited in their initiations of, and responses to, social contacts in racially mixed groups than in homogeneous groups. These findings indicate that subjects were aware of racial differences and this awareness had a negative effect on group functioning.

Group size also affected results. The number of initiations as a function of racial composition was different only for 4-person groups. Also, for black subjects, the ratio of responses to initiations was lower in 4-person groups than in 2-person groups. Both results imply that dyadic situations tend to generate greater feelings of obligation to be sociable, since as Hare (1962) notes, one cannot withdraw and let others carry on the interaction when there are only two persons present.

The finding that the black children were inhibited in their responses in 4-person groups (when compared either to their behavior in 2-person groups or to the behavior of white children in 4-person groups) seems to contradict the conclusions of Goodman (1964) that the black children in her sample were more gregarious and friendly than were the white children. Differences in results from the two studies are difficult to interpret, given the differences in geography and time. However, it seems reasonable that differences in research setting and procedure might have generated

the disparate findings. In the present study, the children were strangers to each other and interacted in a new setting for only 10 minutes. Goodman observed the behavior children in their own nursery school for an extended period of time. Thus, it could be that black children are somewhat more inhibited in new and strange situations than are whites, but they are somewhat more outgoing when the setting and people are familiar.

Both Goodman (1964) and Stevenson and Stevenson (1960) argue that the constraints that inhibit public manifestations of racial attitudes in adults also affect children to the same extent. While the present research does not contradict their specific findings that in racially-mixed groups, the pattern of interaction is relatively unaffected by racial awareness, it does suggest that their conclusion about public behavior and private attitudes in children might have been premature. Results of the present research indicate that racial awareness in children did inhibit interaction, not within racially-mixed groups per se, but when behavior in these groups was compared with that in racially homogeneous groups. A question for future research is the extent to which the inhibitory effects of racial awareness continues as a group develops over time.

References

- Ammons, R. B. Reactions on a projective doll-play interview of white males 2-6 years of age to differences in skin color and facial features. Journal of Genetic Psychology, 1950, 76, 323-341.
- Clark, K. B., & Clark, M. P. Racial identification and preference in Negro children. In H. Proshansky & B. Seidenberg (Eds.), Basic studies in social psychology. New York: Holt, Rinehart and Winston, 1966
- Crooks, R. C. The effects of an interracial preschool program upon racial preference, knowledge of racial differences and racial identification. Journal of Social Issues, 1970, 26, 136-144.
- Goodman, M. E. Race awareness in young children. New York: Collier Books, 1964.
- Hare, A. P. Handbook of small group research. New York: The Free Press, 1962.
- Stevenson, H. W. & Stevenson, N. G. Social interaction in an interracial nursery school. Genetic Psychology Monographs, 1960, 61, 37-75.
- Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1962.

Footnotes

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²Both males and females were included in the samples. However every group was made up of members of the same sex and at least one group of each sex was present in every condition. Problems of small cell size prevented sex from being included as a variable in the statistical analyses, but inspection of the data indicated that it did not affect the results.

³Viewed from another perspective, the tests of simple effects revealed that in 4-person groups, black subjects had lower ratios than did white subjects ($F = 9.77, p < .01$).